

IN THE CLAIMS

1. (Newly Amended) A spread spectrum receiver, comprising:
an antenna for receiving a spread spectrum signal;
a digital filter coupled to said antenna, wherein said digital filter comprise linear predictive coefficients representing interfering periodic or quasi-periodic signals within a specified band containing said spread spectrum signal and wherein said linear predictive coefficients are discarded.

B1 2. (Original) The spread spectrum receiver of Claim 1, wherein said digital filter comprises a linear predictive coding filter.

3. (Cancelled)

4. (Original) The spread spectrum receiver of Claim 1, wherein said specified band corresponds to IEEE 802.11(b).

5. (Original) The spread spectrum receiver of Claim 1, wherein said specified band corresponds to Bluetooth.

6. (Original) The spread spectrum receiver of Claim 1 further comprising a modulated CDMA receiver.


7. (Original) The spread spectrum receiver of Claim 1 further comprising an analog-to-digital converter which converts said spread spectrum signal received by said

antenna into a digital signal which is input directly into said digital filter.

8. (Cancelled)

9. (Cancelled)

10. (Original) The spread spectrum receiver of Claim 2, wherein said linear predictive coding filter outputs a prediction error which is used for signal processing purposes.

 11. (Previously Presented) A linear predictive coding filter for filtering out periodic or quasi-periodic signals in a spread spectrum system wherein the linear predictive coding filter outputs error information which is then used for signal processing purposes.

12. (Cancelled)


13. (Original) The linear predictive coding filter of Claim 11, wherein said spread spectrum system comprises a direct sequence spread spectrum system.

14. (Original) The linear predictive coding filter of Claim 11, wherein said spread spectrum system comprises a frequency hopping spread spectrum system.

15. (Previously Presented) The linear predictive coding filter of Claim 11, wherein linear prediction terms are discarded.

16. (Original) The linear predictive coding filter of Claim 11, wherein said filter is used to filter out said periodic or quasi-periodic signals in compliance with IEEE 802.11(b).

17. (Original) The linear predictive coding filter of Claim 11, wherein said filter is used to filter out said periodic or quasi-periodic signals in compliance with Bluetooth.

 18. (Original) The linear predictive coding filter of Claim 11, wherein said filter is used to filter out said periodic or quasi-periodic signals in a standard modulated CDMA system.

19. (Original) The linear predictive coding filter of Claim 11, wherein said filter is used in a wireless peer-to-peer system.

20. (Previously Presented) A method for filtering periodic or quasi-periodic signals in a spread spectrum signal, comprising:

- receiving said spread spectrum signal;
- digitizing said spread spectrum signal;
- determining linear predictive coefficients corresponding to said spread spectrum signal;
- discarding said linear predictive coefficients, wherein the linear predictive coefficients are not used to actively filter said spread spectrum signal;
- determining error coefficients corresponding to said spread spectrum signal;

processing said error coefficients to retrieve information contained in the spread spectrum signal.

21. (Original) The method of Claim 20, wherein a linear predictive coding filter is used to determine said linear predictive coefficients and said error coefficients.

22. (Cancelled)

23. (Original) The method of Claim 20 further comprising the step of filtering said periodic or quasi-periodic signals in accordance with IEEE 802.11(b).

24. (Original) The method of Claim 20 further comprising the step of filtering said periodic or quasi-periodic signals in accordance with Bluetooth.

25. (Original) The method of Claim 20, wherein said spread spectrum signal comprises a modulated CDMA.

26. (Previously Presented) A spread spectrum receiver, comprising:
an antenna for receiving a spread spectrum signal;
a digital linear predictive coding filter having a lattice structure coupled to said antenna, wherein said digital filter is used to remove periodic or quasi-periodic signals within a specified band containing said spread spectrum signal.

27. (Previously Presented) A spread spectrum receiver, comprising:
an antenna for receiving a spread spectrum signal;

a digital filter coupled to said antenna, wherein said digital filter is used to remove periodic or quasi-periodic signals within a specified band containing said spread spectrum signal and said digital filter outputs a first set of terms which correspond to said periodic signals and a second set of terms which does not include said periodic signals;

an analog-to-digital converter which converts said spread spectrum signal received by said antenna into a digital signal which is input directly into said digital filter.

28. (Previously Presented) The spread spectrum receiver of Claim 27, wherein said first set of terms are discarded and said second set of terms are used for signal processing purposes.

29. (Previously Presented) A linear predictive coding filter for filtering out periodic or quasi-periodic signals in a spread spectrum system, wherein said filter comprises a gradient adaptive lattice.

30. (Previously Presented) A method for filtering periodic or quasi-periodic signals in a spread spectrum signal, comprising:

receiving said spread spectrum signal;
digitizing said spread spectrum signal;
using a linear predictive coding filter to determine linear predictive coefficients and error coefficients corresponding to said spread spectrum signal;
performing a gradient adaptive lattice method to determine said linear predictive coefficients and said error coefficients;

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discarding said linear predictive coefficients;
using said error coefficients in signal processing.
